Toyota three-wheeler does 80.3 mph on compressed air

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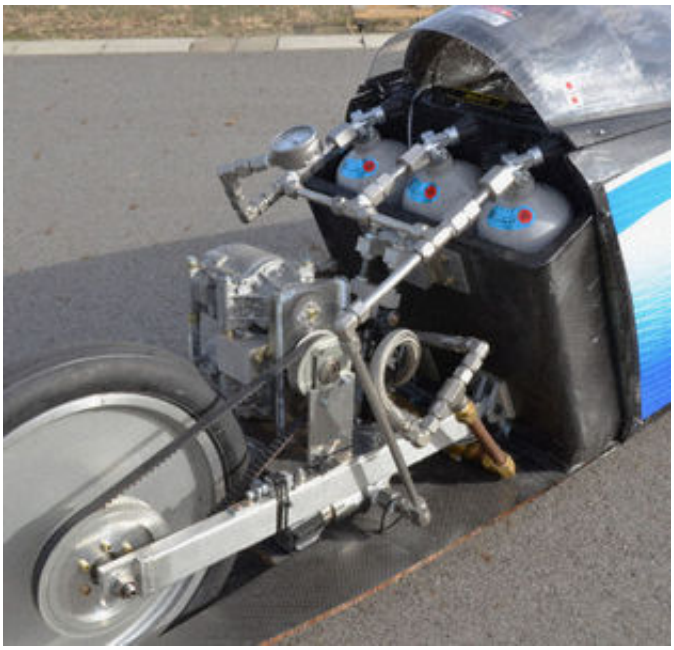
(PhysOrg.com) -- Toyota Industries intends to apply for a Guiness World record for the fastest car driven by a compressed-air engine, after its Ku:Rin, as the vehicle is called, reached 129.2km/h (80.3 mph)on a test run earlier this month. This is a three-wheel, one-seater vehicle that broke the speed record for compressed air-powered vehicles at the Japan Automobile Research Institute test facility.

The Ku:Rin is yet another attempt to explore environmentally friendly modes of transport. The tank was filled using a conventional air-

conditioner compressor manufactured by Toyota.

The car was developed at the company's Dream Car Workshop, where its engineers made use of the principle of compressed air, which Toyota knows more than a little about. The company is recognized for its expertise in compressors that are part of air conditioners. Toyota turns out about 20 million compressors for car air-conditioners per year; the company is the world's largest supplier of car air- conditioner compressors, in addition to making automobiles, engines and electronics components.



Toyota staged a media viewing of the car earlier this week at a factory in Aichi Prefecture. The car is described by observers as a "sleek rocket," or "a pencil-shaped rocket," and, maybe not as kindly, an "eco-friendly tricycle." The vehicle is said to be interesting but not practical. The

driving range is a key reason why skeptics say it is impractical, at least under its present stage of development.

The car offers a driving range of only 2 miles (3.2 km). As with battery powered cars, the marketable barrier remains range, or what is being more frequently called range jitters. The distance the Ku:Rin can go would only be 2 miles without replenishing the air in the cylinders.

According to reports, a number of companies, besides Toyota, are working on air-powered cars but they are all in the research phase. Likewise, the Ku:Rin was designed and built by a group of engineers at the Dream Car Workshop, which is a Toyota sandbox/incubator for innovative ideas.

Company engineers gather there outside work hours to engage in development projects. One of the engineers, Kenta Nakauchi, told NHK TV that they are not thinking about putting the car into production. Instead, they want to use their expertise to design unique cars. At the same time, they are not walking away from the challenge of drawbacks.

Toyota said it will keep working on extending the travel distance.